Variables aléatoires

$X(\Omega) = \{x_1, x_2, x_3\}$.

Q. Determine la loi de probabilité de X.

R $p(X=x_1) = p_1$

$p(X=x_2) = p_2$

$p(X=x_3) = p_3$

X	x_1	x_2	x_3	Total
$p(X=x_i)$	p_1	p_2	p_3	$p_1+p_2+p_3 = 1$

$E(X) = x_1 p_1 + x_2 p_2 + x_3 p_3$

↓

espérance mathématique

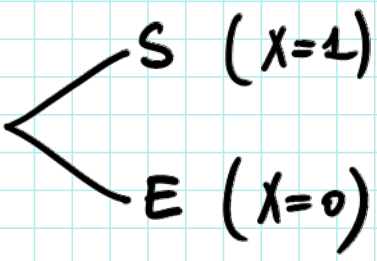
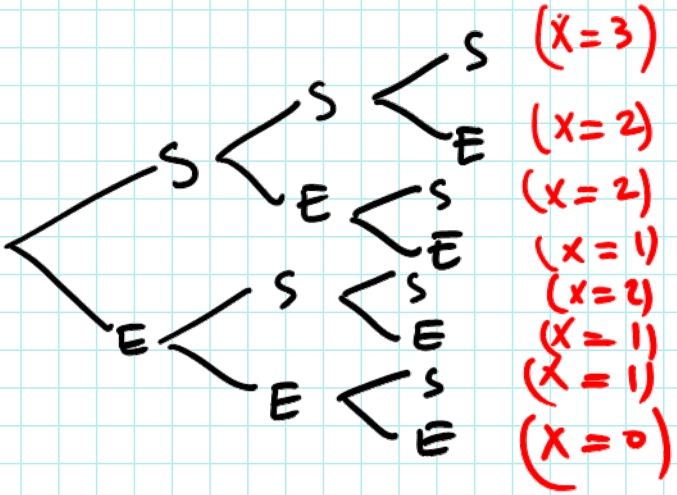
$V(X) = x_1^2 p_1 + x_2^2 p_2 + x_3^2 p_3 - E^2(X)$

↓

variance

$\sigma(X) = \sqrt{V(X)}$

↓

écart-type

loi Binomiale.